

## DRAFT MANAGEMENT RECOMMENDATIONS

Common species required to be protected anywhere within King County		
Species	Species Location	Protection Mechanisms Suggested by Literature
Bald Eagle	Recorded throughout King County, core habitat shown in western portion of King County.  Found in Urban and Rural Environments.	<u>Nest Tree</u> <ul style="list-style-type: none"> <li>400-foot permanent buffer around core nest tree stand. Site specific Bald Eagle Management Plan (BEMP) required for any activities proposed within buffer and which requires consultation with WDFW.</li> <li>400-800 feet retain all known perch trees and all conifers &gt;18 inches in dbh. Also retain 50% of pre-clearing or pre-construction conifer stand with representative diameter. Season disturbance/noise limitations within buffer (Feb 1- June 15).</li> </ul> <u>Roosting/Associated Habitat</u> <ul style="list-style-type: none"> <li>Site specific BEMP for all activities proposed within roosting areas (WDFW).</li> <li>Season disturbance/noise limitations from Nov. 15-March 15.</li> <li>Tree retention requirements within 250 feet of select shoreline areas.</li> </ul>
Common Loon	Recorded in central portion of King County. Small, isolated areas of habitat shown.  Found in Rural Environment.	<ul style="list-style-type: none"> <li>Deter or prohibit recreational activity from known nesting and nursery sites - especially motorized watercraft. Prohibit all motorized activity and keep other watercraft and shoreline recreations further than 492ft from such sites.</li> <li>Shoreline development and buildings within 1,650 feet (500m) of loon nest should be avoided and provide a permanent buffer around nest.</li> <li>Prohibit unnatural lake level water fluctuations.</li> </ul>
Great Blue Heron	Core habitat in western half of King County and nesting locations in western portion of King County.  Found in Urban and Rural Environments.	<ul style="list-style-type: none"> <li>Permanent 1,000 foot buffer around nesting colonies. Buffer may be reduced based on a site specific management plan.</li> <li>Retain mature forest vegetation in vicinity of colony to provide future nesting sites (i.e., 65% retention).</li> </ul>
Marbled Murrelet	Documented within eastern portion of King County, appears to be associated with forest production/federal ownership.  Found in Rural Environment.	<u>Nest Site</u> <ul style="list-style-type: none"> <li>Protect nesting stands from windthrow buffers of 300 feet wide for old growth forest stands of greater than 100 acres and 600 feet wide for less than 100 acres are recommended.</li> <li>Management activities that could disturb breeding should not occur within 0.5 miles from April 1-September 15.</li> <li>Where suitable habitat occurs in areas of likely occurrence, initiate species surveys and identify Murrelet Management Areas if ecologically appropriate.</li> </ul>
Osprey	Occurs throughout King County, associated with riverine, marine, and open water habitats.  Found in Rural and Urban Environments.	<u>Nest Site</u> <ul style="list-style-type: none"> <li>Permanent protective buffers 200 feet. May be reduced to 130 feet based on site specific management plan.</li> <li>Seasonal 660 foot nest protection buffer (April 1 to October 1).</li> </ul>
Peregrine Falcons	Mainly recorded in northwest King County, near Puget sound (marine habitat). Also occurs within select areas within King County.  Found in Urban and Rural Environment.	<u>Nest Site</u> <ul style="list-style-type: none"> <li>Limit human encroachment and disturbance of all types during breeding and early fledging.</li> <li>Seasonal no-construction 1,320 foot buffer around nest site from March 1 to September 15. Restrict human access along cliff rims within 0.5 miles of nests from March 15 to July 31.</li> </ul>
Red-Tailed Hawk	Documented throughout King County.  Found in Rural and Urban Environments.	<u>Nest Site</u> <ul style="list-style-type: none"> <li>Permanent 325 foot buffer around nest tree. May be reduced to 275 feet under special study.</li> <li>625 foot seasonal no-construction buffer around the nest from February 1 through July 31 each year.</li> </ul>

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Spotted Owl	<p>Confirmed breeding sites in forest production areas of King County. Possible breeding sites noted in vicinity of North Bend/Snoqualmie.</p> <p>Habitat identified in Rural Zone (appears to be in E, NE, SE of Snoqualmie).</p>	<ul style="list-style-type: none"> <li>• Initiate surveys in suitable habitat/areas of likely occurrence.</li> <li>• Permanent nest tree buffers and season buffers.</li> <li>• Consult Federal/State Spotted Owl recovery Plans for management suggestions.</li> </ul>

Common species required to be protected outside of urban areas		
Species	Species Location	Protection Mechanisms Suggested by Literature
Northern Goshawk	Core habitat, confirmed breeding in eastern edge of King County, forest production area/federal ownership.  Found in Rural Environment.	<u>Nest Site</u> <ul style="list-style-type: none"> <li>At a minimum, 30 acres of the most suitable nesting habitat surrounding the nest site shall be deferred from (clear cut) harvest. The 30 acres should include known alternate nest sites and plucking posts and should be blocky or circular in shape.</li> <li>A buffer with a 2,625 foot radius around active goshawk nests should be maintained free from disturbance and construction activities between March 1 and September 15.</li> <li>Where suitable habitat occurs in areas of likely occurrence, initiate species surveys.</li> </ul>
Pileated Woodpecker	Recorded throughout King County; core habitat also throughout.	<ul style="list-style-type: none"> <li>If suitable habitat occurs on the parcel, initiate surveys for the species.</li> <li>Protect existing nest tree and associated stand.</li> <li>In Rural, manage patches greater than or equal to 25 acres of remaining forest and woodlots widely distributed through each basin with a canopy closure greater than 70%, at least 3 trees greater than 26 inches in diameter at breast height. Also maintain smaller evenly distributed patches of forest and woodlots between 4 and 12 acres in size to serve as stepping stones and foraging habitat for woodpecker.</li> </ul>
Townsend's Big Eared Bat	Documented within south-central portion of King County. May occur throughout lowland and sub-alpine areas of King County.  Found in Urban and Rural Environment.	<ul style="list-style-type: none"> <li>100 foot buffers on hibernation sites (caves)</li> <li>Gating of cave entrances.</li> <li>Other hibernating roosting sites (sometimes hibernate in structures) evaluated on case by case basis and protected as appropriate.</li> </ul>
Vaux's Swift	Recorded in King County, potential breeding evidence throughout the county (mature/old-growth forested habitat), core habitat includes entire county.  Found in Urban and Rural Environments.	<ul style="list-style-type: none"> <li>Species surveys initiated if suitable habitat occurs on parcel.</li> <li>Preserve nest tree. Permanent buffer established around tree/snag if colony exists.</li> <li>Preserve mature/old-growth forest or snag-rich areas on parcels (i.e., 65 % retention).</li> </ul>

Infrequent species required to be protected		
Species	Species Location	Protection Mechanisms Suggested by Literature
Purple Martin	<p>In Northwestern portion of King County. Core habitat listed in northwest portion of King County.</p> <p>Mainly shown in Urban Environment.</p> <p>Protection required in Rural Environment.</p>	<p><u>Nest Tree</u></p> <ul style="list-style-type: none"> <li>Historically are secondary cavity nesters but also extensively using pilings along rivers and coasts consequently protection of these is helpful.</li> <li>Areas of 40-60 feet adjacent to such nest sites should remain free of human development and be cleared of shrub and tree venation.</li> <li>Housing and human activities beyond 60 feet may be recommended as humans keep raptors and other predators away.</li> </ul>
Golden Eagle	<p>Core habitat and potential breeding sites identified in eastern half of King County, predominantly in forest production/fed ownership.</p> <p>Found in Rural Environment.</p>	<p><u>Nest Site</u></p> <p>Construction activities, trail use, camping below active eyries, and climbing on nest cliffs should be restricted in a 2,625- foot radius around known nest sites during the nesting period of January 15 to July 15</p> <p><u>Roosting/Associated Habitat</u></p> <p>Seasonal disturbance/noise limitations from November 15-March 15.</p>
Larch Mountain Salamander	<p>Documented in the extreme southeast portion of King County. May occur in upper watershed areas, associated with talus slopes</p> <p>Found in Rural Environment.</p>	<ul style="list-style-type: none"> <li>Avoid impacting talus slopes.</li> <li>Buffer talus slopes with 90-150 foot protected area and leave 50% or more of additional uncut forested areas beyond buffer</li> </ul>
Fisher	<p>Documented in King County (far east), core and peripheral habitats shown in eastern King County mostly associated with forest production.</p>	<p>Minimize forest fragmentation within old growth forests and the mountain hemlock zone by utilizing uneven-aged harvest techniques to reduce the percentage of stand perimeter consisting of clearcut edge.</p>
Columbia Black-Tailed Deer	<p>Mule deer, found throughout King County (exception is urban environment).</p>	<ul style="list-style-type: none"> <li>Reduce habitat fragmentation/migration corridor obstructions (fences, etc.).</li> <li>Establish road closures of winter range during the fall and winter months to buffer the influences of increased human disturbance. Roads on winter range open to public use should be limited to 0.5 mile of road per 1 square mile of habitat.</li> <li>Development standards on deer winter range should be of the lowest that is feasible, with screening vegetation adjacent to developed lots.</li> </ul>
Elk	<p>Core habitat in eastern portion of King County.</p> <p>Found in Rural Environment.</p>	<ul style="list-style-type: none"> <li>Reduce habitat fragmentation/migration corridor obstructions (fences, etc.).</li> <li>Secure management control of critical preferred winter/spring habitat for elk through lease agreements, easements, landowner incentives, or fee purchase.</li> <li>Elk calving habitat should be protected from disturbance from May 1 to June 30. Calving habitat should be provided within 1,000 feet of water on gentle slopes that contain at least 40% of the area in cover patches. Forage opening should occur as small, scattered patches. Cover patches should be at least 200 feet wide and have a canopy that exceeds 70% of trees more than 40 feet tall.</li> </ul>
Mink	<p>Documented in northwestern portions of King County. Habitat occurs throughout King County.</p>	<ul style="list-style-type: none"> <li>Maintain a 75% tree, shrub, and/or persistent emergent herbaceous vegetation canopy within a 330 foot riparian buffer along streams, marshes, and shorelines (Allen 1984).</li> <li>Maintain a minimum of 75% tree and/or shrub canopy closure within 330 feet of the water's or wetland's edge (Allen 1984).</li> </ul>

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Band-Tailed Pigeon	Species recorded throughout King County (Urban and Rural), core and peripheral habitats throughout King County.	<ul style="list-style-type: none"> <li>• Manage forests to produce areas of dense berry producing understories and thickets of red elderberries and cascara in clear-cuts. Leave 3 trees or snags/acre in clear-cuts to serve as perch trees.</li> <li>• In mineral poor regions, consider providing salt-licks for pigeons containing sodium and calcium salts by bearing the mineral blocks at natural seeps. Maintain perch trees near mineral sites.</li> <li>• Manage patches of remaining forest and woodlots to include patches greater than or equal to 25 acres widely distributed through each basin and smaller (4-12 acre stepping stone habitat patches) distributed through the landscape.</li> </ul>
Western Toad	Core habitat identified in eastern and western King County, predominantly outside of Urban Zone.  Found in both Urban and Rural Environment.	Maintain forests adjacent to breeding ponds and wetlands.
Harlequin Duck	Recorded in King County (central portion), core habitat shown in eastern half of King County.	<ul style="list-style-type: none"> <li>• Provide a 100foot (30m) buffer adjacent to nesting streams to recruit large organic debris. Also avoid logging adjacent to such streams and limit disturbance, trails and roads to at least 165 feet beyond streams.</li> <li>• Minimize stream hydrological changes that would influence invertebrate food supplies.</li> <li>• Minimize recreational disturbance during nesting and brooding from May through August.</li> </ul>
Western Bluebird	Confirmed breeding evidence in north central and south central King County. Core habitat zone identified in north central portion of King County, peripheral zones in north central and south central King County.  Urban and Rural Environment.	<ul style="list-style-type: none"> <li>• At elevation above 600-1,000 feet, bluebirds are able to compete successfully for nesting cavities. In these regions, manage forests to retain snags and retain older, large, and partially dead trees.</li> <li>• Retain snags greater than 10 feet tall and 15 inches in diameter at breast height around the edges of clear-cuts (Brown 1985). Leave defective trees with heart rot, distortions, or damage as potential nest sites.</li> </ul>
Blue Grouse	Species observations shown in eastern half of King County core habitat in eastern half of King County.	<ul style="list-style-type: none"> <li>• Where blue grouse occur, use clearcuts smaller than 800 feet across and leave at least 40 trees per hectare with a minimum 9 inch diameter at breast height on wintering areas.</li> <li>• Use longer rotations (greater than 60 years) for wintering habitat.</li> <li>• Retain known winter roost areas including mature mistletoe-laden Douglas-fir thickets near ridges.</li> </ul>
Mountain Goat	Documented within eastern portion of King County, appears to be associated with forest production/federal ownership.	<ul style="list-style-type: none"> <li>• Retain conifers in an unmanaged condition 300 feet directly above and below cliffs used by mountain goats.</li> <li>• Maintain a one-quarter mile zone free from human disturbance around escape terrain year-round and minimize disturbance within 1 mile or escape terrain between November 1 and the end of June.</li> <li>• Maintain cover in travel corridor between cliffs used by mountain goats.</li> </ul>
Wolverine	Recorded in King County, core habitat shown along eastern edge of King County/forest production/federal ownership.	<ul style="list-style-type: none"> <li>• Protect large undisturbed forested and other natural areas.</li> <li>• Forest practices in mountain corridors between protected wilderness areas should protect and provide appropriate structures, such as large cavities, coarse woody debris, and old beaver lodges to provide den sites.</li> </ul>

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American Marten	Documented in King County (far east), core and peripheral habitats shown in eastern King County mostly associated with forest production/Federal ownership.	<ul style="list-style-type: none"> <li>• Maintain forested riparian buffers of approximately 330 feet on each side of streams or terrestrial corridors at least 600 feet wide connecting patches of forest that contain suitable complex physical structure at ground level for martens).</li> <li>• Maintain marten habitat patches with a minimum size of 37.5 acres and average size of at least 600 acres, connected by forested riparian corridors to maintain.</li> </ul>
Van Dyke's Salamander	Currently only identified in three areas of western Washington. Not known to occur in King County.	<ul style="list-style-type: none"> <li>• Protect headwater and smaller streams and adjacent buffers where salamanders are found from yarding, heavy equipment and timber harvests. Suggested buffer widths range from 90-150 feet.</li> <li>• Retain and/or maintain 50% shade along stream banks, seeps, wet talus and other such areas.</li> </ul>